

Since none of the current commissioners has sufficient technical background, training, or expertise to actually understand what they are overseeing, let's be very clear on what will happen when or if BPL is widely adopted. For the record, not only do I hold an Amateur Extra Class license, I also hold a Bachelor of Science in Electrical Engineering, with over 20 years of experience in the field.

1) Power lines were not designed for, nor ever intended to carry HF signals. Using them for purposes not included in the original design, is ill advised from an engineering perspective, and poor management from a business perspective. Ask NASA what happens when you don't listen to your engineers. Can anyone on the commission remember the Challenger disaster? How about Columbia? Who will be the first to lose an aircraft over the ocean when their HF aeronautical radios don't work? I know, no one thought there would ever be a problem with Challenger or Columbia either. No one except the engineers, that is.

2) Power lines, with their complex and varying load impedances will radiate BPL signals in the HF spectrum. They will also be highly susceptible to receiving interference from the HF spectrum. This cannot be avoided, since they are unshielded conductors. You may repeal the laws of common sense using U.S. currency, but you can't repeal the laws of physics.

3) Power companies can barely deliver electrical power reliably. Their infrastructure is old and dilapidated. They do not maintain their capability to deliver power. Or have you forgotten the huge blackout last August? And you want to allow them to try and deliver broadband internet over this wiring? Common sense dictates that this is ill-advised.

4) Power companies are notoriously poor at resolving interference problems while attempting to deliver 60Hz power. I do not foresee this changing when they attempt to deliver broadband internet service via these same lines. Please check with your internal staff regarding this - specifically Mr. Riley Hollingsworth. You already have documented proof of this. Allowing this to continue is the equivalent of letting the fox manage the chicken coop. Who in their right mind would do that?

5) There are better ways to deliver broadband internet service than using the power lines and the HF spectrum. Better both from a technical perspective, and better from an economic perspective for the prospective provider of service. The government of the United Kingdom, the government of The Netherlands, the government of Austria, and the government of Japan have all realized this. Their findings and results are widely published. They have all discovered (the hard way I might add) that using the power grid to deliver broadband internet service is a bad idea, and doesn't work properly.

Yes it is technically possible to deliver broadband service over power lines. It has been repeatedly demonstrated that this approach is undesirable, and doesn't work. It is a bad idea,

and represents poor public policy. Trashing a valuable resource like the HF spectrum is never good public policy. It's time to for the Commission to exercise some common sense instead of acting irresponsibly. Wake up and act appropriately before someone dies. You can learn from the mistakes of NASA. You don't have to repeat them. Listen to the engineers for a change instead of the lobbyists. You'll be glad you did.

John E. Jessen, BSEE
N8AUC
Fairview Park, Ohio